PTO/SB/08A (10-01)
Approved for use through 10/31/2002.OMB 0651-0031
U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Subs	titute for form 1449A/P	TO			Complete if Known
0233				Application Number	10/055797
IN	FORMATIC	ON DI	SCLOSURE	Filing Date	January 22, 2002 JUA .
S	TATEMENT	BY A	APPLICANT	First Named Inventor	David Beach 200:
_				Art Unit	1638 1435 EVA CEARED
	(use as many	sheets as	necessary)	Examiner Name	Not Yet Assigned
Sheet	1	of	5	Attorney Docket Number	GNCA-P03-007

U.S. PATENT DOCUMENTS						
Cuaminas	Cia	Document Number	Publication Date	Name of Patentee or Applicant	Pages, Columns, Lines, Where Relevant	
Examiner Initials*	Cite No. ¹	Number-Kind Code ² (if known)	MM-DD-YYYY	of Cited Document	Passages or Relevant Figures Appear	
KC	AA	6,326,193	12-04-2001	Liu et al.		

	FOREIGN PATENT DOCUMENTS						
Examiner	Cite	Foreign Patent Document	Publication Date	Name of Patentee or	Pages, Cotumns, Lines, Where Relevant	Π	
Initials*	No.1	Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	MM-DD-YYYY	Applicant of Cited Document	Passages or Relevant Figures Appear	T ⁶	
KC	AB	WO 01/36646	05-25-2001	Cancer Res. Campaign Tech.		I_{-}	
74	AC	WO 01/48183	07-05-2001	Devgen NV			
VC.	AD	WO 01/75164	10-11-2001	Whitehead Inst. Biomed. Res.		T	
W	AE	WO 02/44321	06-06-2002	Max-Planck-Gesellschaft		T.	
VI	AF	WO 02/059300	08-01-2002	J & J Res. Pty Ltd		\mathbb{T}	
Tel	AG	WO 02/068635	09-06-2002	Novartis		T	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant

¹ Applicant's unique citation designation number (optional). ² See attached Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³
Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ¹For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the application number of the patent document. ³ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁴ Applicant is to place a check mark here if English language Translation is attached.

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
D	АН	Bass, B.L. Double-Stranded RNA as a Template for Gene Silencing. <i>Cell</i> 101, 235-238 (2000).	
W	Al	Baulcombe, D.C. RNA as a target and an initiator of post-transcriptional gene silencing in transgenic plants. <i>Plant Mol. Biol.</i> 32, 79-88 (1996).	
w	AJ	Baulcombe, D.C. Gene silencing: RNA makes RNA makes no protein. Curr. Biol. 9, R599-R601 (1999).	
W.	AK	Bohmert, K. et al. AGO1 defines a novel locus of Arabidopsis controlling leaf development. <i>EMBO J.</i> 17, 170-180 (1998).	
\$	AL	Bosher, J.M. et al. RNA Interference Can Target Pre-mRNA: Consequences for Gene Expression in a Caenorhabditis elegans Operon. <i>Genetics</i> 153, 1245-1256 (Nov. 1999).	
W	AM	Bosher, J.M. & Labouesse, M. RNA interference: genetic wand and genetic watchdog. Nat. Cell Biol. 2, E31-36 (2000).	
TO	AN	Catalanotto, C. et al. Gene silencing in worms and fungi. Nature 404, 245 (2000).	

Examiner Signature	olber has	Date Considered	1-27-045

JUN 0 5 5003 Under the F

HADE

Substitute for form 1449A/PTO

PTO/SB/08A (10-01)
Approved for use through 10/31/2002.OMB 0651-0031
U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

ork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB conf

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Complete if Known 10/055797 Application Number Filing Date January 22, 2002 First Named Inventor **David Beach** Art Unit Examiner Name Not Yet Assigned

(use as many sheets as necessary)

GNCA-P03-007 · 2 5 Attomey Docket Number Sheet of

K	AO	Cogoni, C. & Macino, G. Gene silencing in Neurospora crassa requires a protein homologous to RNA-dependent RNA polymerase. <i>Nature</i> 399, 166-169 (1999).
4	AP	Cogoni, C. & Macino, G. Posttranscriptional Gene Silencing in Neurospora by a RecQ DNA Helicase. Science 286, 2342-2344 (1999).
14	AQ	Connelly, J.C. & Leach, D.R. The sbcC and sbcD genes of Escherichia coli encode a nuclease involved in palindrome inviability and genetic recombination. <i>Genes Cell</i> 1, 285-291 (1996).
μ	AR	Dalmay, T. et al. An RNA-Dependent RNA Polymerase Gene in Arabidopsis is Required for Posttranscriptional Gene Silencing Mediated by a Transgene but Not by a Virus. <i>Cell</i> 101, 543-553 (2000).
K	AS	Di Nocera, P.P. & Dawid, I.B. Transient expression of genes introduced into cultured cells of Drosophila. <i>PNAS</i> 80, 7095-7098 (1983).
KC	AT	Fagard, M. et al. AG01, QDE-2, and RDE-1 are related proteins required for post-transcriptional gene silencing in plants, quelling in fungi, and RNA interference in animals. PNAS 97, 11650-11654 (10 Oct. 2000).
KC	AU	Fire, A. RNA-triggered gene silencing. Trends Genet. 15, 358-363 (1999).
KC	AV	Fire, A. et al. Potent and specific genetic interference by double-stranded RNA in Caenorhabditis elegans. <i>Nature</i> 391, 806-811 (1998).
KC	ĀW	Fortier, E. & Belote, J.M. Temperature-Dependent Gene Silencing by an Expressed Inverted Repeat in Drosophila. <i>Genesis</i> 26, 240-244 (2000).
KL	AX	Gillespie, D.E. & Berg, C.A. homeless is required for RNA localization in Drosophila oogenesis and encodes a new member of the DE-H family of RNA-dependent ATPases. <i>Genes Dev.</i> 9, 2495-2508 (1995).
KC	AY	Guo, S. & Kemphues, K.J. par-1, a Gene Required for Establishing Polarity in C. elegans Embryos, Encodes a Putative Ser/Thr Kinase that is Asymmetrically Distributed. <i>Cell</i> 81, 611-620 (1995).
pC	AZ	Hamilton, J.A. & Baulcombe, D.C. A Species of Small Antisense RNA in Posttranscriptional Gene Silencing in Plants. Science 286, 950-952 (1999).
KC	BA	Hammond, S.M. et al. An RNA-directed nuclease mediates post-transcriptional gene silencing in Drosophila cells. <i>Nature</i> 404, 293-296 (2000).
KU	ВВ	Hunter, C. Genetics: A touch of elegance with RNAi. Curr. Biol. 9, R440-R442 (1999).
KC	ВС	Jacobsen, S.E. et al. Disruption of an RNA helicase/RNAse III gene in Arabidopsis causes unregulated cell division in floral meristems. <i>Development</i> 126, 5231-5243 (1999).
W	BD	Jones, A.L. et al. De novo methylation and co-suppression induced by a cytoplamically replicating plant RNA virus. <i>EMBO J.</i> 17, 6385-6393 (1998).

1127105 Examiner Date Considered Signature

JUN 0 2 2003

PTO/SB/08A (10-01)

Approved for use through 10/31/2002.0MB 0651-0031

U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paper or Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

We.	stitute for form 1449A/PTC)			Complete if Known
		_		Application Number	10/055797
11	IFORMATIO	N DI	SCLOSURE	Filing Date	January 22, 2002
S	TATEMENT	BY A	APPLICANT	First Named Inventor	David Beach
				Art Unit	1638-1635 FCV
	(use as many sl	heets as	necessary)	Examiner Name	Not Yet Assigned CFA
Sheet	3	of	5	Attorney Docket Number	GNCA-P03-007
		_	· · · · · · · · · · · · · · · · · · ·		·

Reting R.F. et al. An Integral Membrane Green Fluorescent Protein Marker, Us9-GFP, is Quantitatively Retained in Cells during Propidium lodide-Based Cell Cycle Analysis by Flow Cytometry. Exp. Cell. Res. 248, 322-328 (1999). BG Kennerdell, J.R. & Carthew, R.W. Use of dsRNA-Mediated Genetic Interference to Demonstrate that frizzled and frizzled 2 Act in the Wingless Pathway. Cell 95, 1017-1026 (1998). BH Kennerdell, J.R. & Carthew, R.W. Heritable gene silencing in Drosophila using double-stranded RNA. Nat. Biotechnol. 17, 896-898 (2000). BI Ketting, R.F. et al. mut-7 of C. elegans, Required for Transposon Silencing and RNA Interference, is a Homolog of Werner Syndrome Helicase and RNaseD. Cell 99, 133-141 (1999). BJ Kramer, E.R. et al. Activation of the human anaphase-promoting complex by proteins of the CDC20/Fizzy family. Curr. Biol. 8, 1207-1210 (1998). BK Lam, G. & Thummel, C.S. Inducible expression of double-stranded RNA directs specific genetic interference in Drosophila. Curr. Biol. 10, 957-963 (2000). BL Lohmann, J.U. et al. Silencing of Developmental Genes in Hydra. Dev. Biol. 214, 211-214 (1999). BM Matsuda, S. et al. Molecular cloning and characterization of a novel human gene (HERNA) which encodes a putative RNA-helicase. Biochim. Biophys. Acta 1490, 163-169 (2000). BN Misquitta, L. & Paterson, B.M. Targeted disruption of gene function in Drosophila by RNA interference (RNA-i): A role for nautilius in embryonic somatic muscle formation. PNAS 96, 1451-1456 (Feb. 1999). BO Montgomery, M.K. et al. RNA as a target of double-stranded RNA-mediated genetic interference in Caenorhabditis elegans. PNAS 95, 15502-15507 (Dec. 1998). BO Montgomery, M.K. & Fire, A. Double-stranded RNA as a mediator in sequence-specific genetic silencing and os-suppression. Trends Genet. 14, 255-258 (1998). BO Mourrain, P. et al. Arabidopsis SGS2 and SGS3 Genes are Required for Posttranscriptional Gene Silencing and Natural Virus Resistance. Cell 101, 533-542 (2000).	KC	BE	Jones, L. et al. RNA-DNA Interactions and DNA Methylation in Post-Transcriptional Gene Silencing. <i>Plant Cell</i> 11, 2291-2301 (Dec. 1999).	
Demonstrate that frizzled and frizzled 2 Act in the Wingless Pathway. Cell 95, 1017-1026 (1998). BH Kennerdell, J.R. & Carthew, R.W. Heritable gene silencing in Drosophila using double-stranded RNA. Nat. Biotechnol. 17, 896-898 (2000). BI Ketting, R.F. et al. mut-7 of C. elegans, Required for Transposon Silencing and RNA Interference, Is a Homolog of Werner Syndrome Helicase and RNaseD. Cell 99, 133-141 (1999). BJ Kramer, E.R. et al. Activation of the human anaphase-promoting complex by proteins of the CDC20/Fizzy family. Curr. Biol. 8, 1207-1210 (1998). BK Lam, G. & Thummel, C.S. Inducible expression of double-stranded RNA directs specific genetic interference in Drosophila. Curr. Biol. 10, 957-963 (2000). BL Lohmann, J.U. et al. Silencing of Developmental Genes in Hydra. Dev. Biol. 214, 211-214 (1999). BM Matsuda, S. et al. Molecular cloning and characterization of a novel human gene (HERNA) which encodes a putative RNA-helicase. Biochim. Biophys. Acta 1490, 163-169 (2000). BN Misquitta, L. & Paterson, B.M. Targeted disruption of gene function in Drosophila by RNA interference (RNA-i): A role for nautilius in embryonic somatic muscle formation. PNAS 96, 1451-1456 (Feb. 1999). BO Montgomery, M.K. et al. RNA as a target of double-stranded RNA-mediated genetic interference in Caenorhabditis elegans. PNAS 95, 15502-15507 (Dec. 1998). BO Montgomery, M.K. & Fire, A. Double-stranded RNA as a mediator in sequence-specific genetic silencing and co-suppression. Trends Genet. 14, 255-258 (1998). BO Mourrain, P. et al. Arabidopsis SGS2 and SGS3 Genes are Required for Posttranscriptional Gene Silencing and Natural Virus Resistance. Cell 101, 533-542 (2000).	K	BF	Quantitatively Retained in Cells during Propidium Iodide-Based Cell Cycle Analysis by Flow	
stranded RNA. Nat. Biotechnol. 17, 896-898 (2000). BI Ketting, R.F. et al. mut-7 of C. elegans, Required for Transposon Silencing and RNA Interference, Is a Homolog of Werner Syndrome Helicase and RNaseD. Cell 99, 133-141 (1999). BJ Kramer, E.R. et al. Activation of the human anaphase-promoting complex by proteins of the CDC20/Fizzy family. Curr. Biol. 8, 1207-1210 (1998). BK Lam, G. & Thummel, C.S. Inducible expression of double-stranded RNA directs specific genetic interference in Drosophila. Curr. Biol. 10, 957-963 (2000). BL Lohmann, J.U. et al. Silencing of Developmental Genes in Hydra. Dev. Biol. 214, 211-214 (1999). BM Matsuda, S. et al. Molecular cloning and characterization of a novel human gene (HERNA) which encodes a putative RNA-helicase. Biochim. Biophys. Acta 1490, 163-169 (2000). BN Misquitta, L. & Paterson, B.M. Targeted disruption of gene function in Drosophila by RNA interference (RNA-i): A role for nautilus in embryonic somatic muscle formation. PNAS 96, 1451-1456 (Feb. 1999). BO Montgomery, M.K. et al. RNA as a target of double-stranded RNA-mediated genetic interference in Caenorhabditis elegans. PNAS 95, 15502-15507 (Dec. 1998). BO Montgomery, M.K. & Fire, A. Double-stranded RNA as a mediator in sequence-specific genetic silencing and co-suppression. Trends Genet. 14, 255-258 (1998). BO Mourrain, P. et al. Arabidopsis SGS2 and SGS3 Genes are Required for Posttranscriptional Gene Silencing and Natural Virus Resistance. Cell 101, 533-542 (2000). BR NOO, H. et al. Double-stranded RNA induces mRNA degradation in Trypanosoma brucei. PNAS 95, 14687-14692 (Dec. 1998).	KL	BG	Demonstrate that frizzled and frizzled 2 Act in the Wingless Pathway. Cell 95, 1017-1026	
Interference, Is a Homolog of Werner Syndrome Helicase and RNaseD. Cell 99, 133-141 (1999). BJ Kramer, E.R. et al. Activation of the human anaphase-promoting complex by proteins of the CDC20/Fizzy family. Curr. Biol. 8, 1207-1210 (1998). BK Lam, G. & Thummel, C.S. Inducible expression of double-stranded RNA directs specific genetic interference in Drosophila. Curr. Biol. 10, 957-963 (2000). BL Lohmann, J.U. et al. Silencing of Developmental Genes in Hydra. Dev. Biol. 214, 211-214 (1999). BM Matsuda, S. et al. Molecular cloning and characterization of a novel human gene (HERNA) which encodes a putative RNA-helicase. Biochim. Biophys. Acta 1490, 163-169 (2000). BN Misquitta, L. & Paterson, B.M. Targeted disruption of gene function in Drosophila by RNA interference (RNA-i): A role for nautilus in embryonic somatic muscle formation. PNAS 96, 1451-1456 (Feb. 1999). BO Montgomery, M.K. et al. RNA as a target of double-stranded RNA-mediated genetic interference in Caenorhabditis elegans. PNAS 95, 15502-15507 (Dec. 1998). BP Montgomery, M.K. & Fire, A. Double-stranded RNA as a mediator in sequence-specific genetic silencing and co-suppression. Trends Genet. 14, 255-258 (1998). BQ Mourrain, P. et al. Arabidopsis SGS2 and SGS3 Genes are Required for Posttranscriptional Gene Silencing and Natural Virus Resistance. Cell 101, 533-542 (2000). BR Ngo, H. et al. Double-stranded RNA induces mRNA degradation in Trypanosoma brucei. PNAS 95, 14687-14692 (Dec. 1998).	K	ВН		
BJ Kramer, E.R. et al. Activation of the human anaphase-promoting complex by proteins of the CDC20/Fizzy family. Curr. Biol. 8, 1207-1210 (1998). BK Lam, G. & Thummel, C.S. Inducible expression of double-stranded RNA directs specific genetic interference in Drosophila. Curr. Biol. 10, 957-963 (2000). BL Lohmann, J.U. et al. Silencing of Developmental Genes in Hydra. Dev. Biol. 214, 211-214 (1999). BM Matsuda, S. et al. Molecular cloning and characterization of a novel human gene (HERNA) which encodes a putative RNA-helicase. Biochim. Biophys. Acta 1490, 163-169 (2000). BN Misquitta, L. & Paterson, B.M. Targeted disruption of gene function in Drosophila by RNA interference (RNA-i): A role for nautilus in embryonic somatic muscle formation. PNAS 96, 1451-1456 (Feb. 1999). BO Montgomery, M.K. et al. RNA as a target of double-stranded RNA-mediated genetic interference in Caenorhabditis elegans. PNAS 95, 15502-15507 (Dec. 1998). BP Montgomery, M.K. & Fire, A. Double-stranded RNA as a mediator in sequence-specific genetic silencing and co-suppression. Trends Genet. 14, 255-258 (1998). BQ Mourrain, P. et al. Arabidopsis SGS2 and SGS3 Genes are Required for Posttranscriptional Gene Silencing and Natural Virus Resistance. Cell 101, 533-542 (2000). BR Ngo, H. et al. Double-stranded RNA induces mRNA degradation in Trypanosoma brucei. PNAS 95, 14687-14692 (Dec. 1998).	R	BI	Interference, Is a Homolog of Werner Syndrome Helicase and RNaseD. Cell 99, 133-141	
BK Lam, G. & Thummel, C.S. Inducible expression of double-stranded RNA directs specific genetic interference in Drosophila. Curr. Biol. 10, 957-963 (2000). BL Lohmann, J.U. et al. Silencing of Developmental Genes in Hydra. Dev. Biol. 214, 211-214 (1999). BM Matsuda, S. et al. Molecular cloning and characterization of a novel human gene (HERNA) which encodes a putative RNA-helicase. Biochim. Biophys. Acta 1490, 163-169 (2000). BN Misquitta, L. & Paterson, B.M. Targeted disruption of gene function in Drosophila by RNA interference (RNA-i): A role for nautilus in embryonic somatic muscle formation. PNAS 96, 1451-1456 (Feb. 1999). BO Montgomery, M.K. et al. RNA as a target of double-stranded RNA-mediated genetic interference in Caenorhabditis elegans. PNAS 95, 15502-15507 (Dec. 1998). BP Montgomery, M.K. & Fire, A. Double-stranded RNA as a mediator in sequence-specific genetic silencing and co-suppression. Trends Genet. 14, 255-258 (1998). BQ Mourrain, P. et al. Arabidopsis SGS2 and SGS3 Genes are Required for Posttranscriptional Gene Silencing and Natural Virus Resistance. Cell 101, 533-542 (2000). BR Ngo, H. et al. Double-stranded RNA induces mRNA degradation in Trypanosoma brucei. PNAS 95, 14687-14692 (Dec. 1998).	Q	BJ		
BM Matsuda, S. et al. Molecular cloning and characterization of a novel human gene (HERNA) which encodes a putative RNA-helicase. <i>Biochim. Biophys. Acta</i> 1490, 163-169 (2000). BN Misquitta, L. & Paterson, B.M. Targeted disruption of gene function in Drosophila by RNA interference (RNA-i): A role for nautilus in embryonic somatic muscle formation. <i>PNAS</i> 96, 1451-1456 (Feb. 1999). BO Montgomery, M.K. et al. RNA as a target of double-stranded RNA-mediated genetic interference in Caenorhabditis elegans. <i>PNAS</i> 95, 15502-15507 (Dec. 1998). BP Montgomery, M.K. & Fire, A. Double-stranded RNA as a mediator in sequence-specific genetic silencing and co-suppression. <i>Trends Genet</i> . 14, 255-258 (1998). BQ Mourrain, P. et al. Arabidopsis SGS2 and SGS3 Genes are Required for Posttranscriptional Gene Silencing and Natural Virus Resistance. <i>Cell</i> 101, 533-542 (2000). BR Ngo, H. et al. Double-stranded RNA induces mRNA degradation in Trypanosoma brucei. <i>PNAS</i> 95, 14687-14692 (Dec. 1998).	K	BK		
which encodes a putative RNA-helicase. Biochim. Biophys. Acta 1490, 163-169 (2000). BN Misquitta, L. & Paterson, B.M. Targeted disruption of gene function in Drosophila by RNA interference (RNA-i): A role for nautilus in embryonic somatic muscle formation. PNAS 96, 1451-1456 (Feb. 1999). BO Montgomery, M.K. et al. RNA as a target of double-stranded RNA-mediated genetic interference in Caenorhabditis elegans. PNAS 95, 15502-15507 (Dec. 1998). BP Montgomery, M.K. & Fire, A. Double-stranded RNA as a mediator in sequence-specific genetic silencing and co-suppression. Trends Genet. 14, 255-258 (1998). BQ Mourrain, P. et al. Arabidopsis SGS2 and SGS3 Genes are Required for Posttranscriptional Gene Silencing and Natural Virus Resistance. Cell 101, 533-542 (2000). BR Ngo, H. et al. Double-stranded RNA induces mRNA degradation in Trypanosoma brucei. PNAS 95, 14687-14692 (Dec. 1998).	w	BL		
BN Misquitta, L. & Paterson, B.M. Targeted disruption of gene function in Drosophila by RNA interference (RNA-i): A role for nautilus in embryonic somatic muscle formation. PNAS 96, 1451-1456 (Feb. 1999). BO Montgomery, M.K. et al. RNA as a target of double-stranded RNA-mediated genetic interference in Caenorhabditis elegans. PNAS 95, 15502-15507 (Dec. 1998). BP Montgomery, M.K. & Fire, A. Double-stranded RNA as a mediator in sequence-specific genetic silencing and co-suppression. Trends Genet. 14, 255-258 (1998). BQ Mourrain, P. et al. Arabidopsis SGS2 and SGS3 Genes are Required for Posttranscriptional Gene Silencing and Natural Virus Resistance. Cell 101, 533-542 (2000). BR Ngo, H. et al. Double-stranded RNA induces mRNA degradation in Trypanosoma brucei. PNAS 95, 14687-14692 (Dec. 1998).	le	ВМ		
interference in Caenorhabditis elegans. PNAS 95, 15502-15507 (Dec. 1998). BP Montgomery, M.K. & Fire, A. Double-stranded RNA as a mediator in sequence-specific genetic silencing and co-suppression. Trends Genet. 14, 255-258 (1998). BQ Mourrain, P. et al. Arabidopsis SGS2 and SGS3 Genes are Required for Posttranscriptional Gene Silencing and Natural Virus Resistance. Cell 101, 533-542 (2000). BR Ngo, H. et al. Double-stranded RNA induces mRNA degradation in Trypanosoma brucei. PNAS 95, 14687-14692 (Dec. 1998).		BN	interference (RNA-i): A role for nautilus in embryonic somatic muscle formation. PNAS 96,	
genetic silencing and co-suppression. Trends Genet. 14, 255-258 (1998). BQ Mourrain, P. et al. Arabidopsis SGS2 and SGS3 Genes are Required for Posttranscriptional Gene Silencing and Natural Virus Resistance. Cell 101, 533-542 (2000). BR Ngo, H. et al. Double-stranded RNA induces mRNA degradation in Trypanosoma brucei. PNAS 95, 14687-14692 (Dec. 1998).	W	ВО		
Gene Silencing and Natural Virus Resistance. Cell 101, 533-542 (2000). BR Ngo, H. et al. Double-stranded RNA induces mRNA degradation in Trypanosoma brucei. PNAS 95, 14687-14692 (Dec. 1998).	\vdash	BP		
PNAS 95, 14687-14692 (Dec. 1998).	VC.	BQ		
	W	BR		
Ratcliff, F. et al. A Similarity Between Viral Defense and Gene Silencing in Plants. Science 276, 1558-1560 (1997).	W	BS	Ratcliff, F. et al. A Similarity Between Viral Defense and Gene Silencing in Plants. <i>Science</i> 276, 1558-1560 (1997).	

Date Considered 1/27/05 Examiner Signature

JUH 0 2 2003

Sheet

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

\							
				•			
¥}				O.	70/00 mon / 40 o41		
jj –				oved for use through 10/31/200			
Reduction A	Act of 1995	, no persons are required to n		ark Office: U.S. DEPARTMENT nation unless it contains a valid Of			
orm 14494/PTO			Complete if Known				
om 1449A/PT	го			Complete if Known			
om 1449A/PT	го		Application Number	10/055797			
		SCLOSURE		r ' -	TUN CENED		
MATIO	N DI	SCLOSURE APPLICANT	Application Number	10/055797	CHO \$ 2000 W		
MATIO EMENT	N DIS	APPLICANT	Application Number Filing Date	10/055797 January 22, 2002	CH CENTER & 2003 N		
MATIO EMENT	N DIS	APPLICANT	Application Number Filing Date First Named Inventor	10/055797 January 22, 2002 David Beach	CHCENTER 4 2003 N		
MATIO	N DIS	APPLICANT	Application Number Filing Date First Named Inventor Art Unit	10/055797 January 22, 2002 David Beach 1638- (@35	10N 4 2003 N 1600/2800		

	ВТ	Sanchez Alvarado, A. & Newmark, P.A. Double-stranded RNA specifically disrupts gene
4	ы	expression during planarian regeneration. <i>PNAS</i> 96, 5049-5054 (April 1999).
K	BU	Schneider, I. Cell lines derived from late embryonic stages of Drosophila melanogaster. J. Embryol. Exp. Morpho. 27, 353-365 (1972).
KC	BV	Sharp, P.A. RNAi and double-strand RNA. Genes Dev. 13, 139-141 (1999).
K	BW	Shi, H. et al. Genetic interference in Typanosoma brucei by heritable and inducible double- stranded RNA. RNA 6, 1069-1076 (2000).
pl	ВХ	Shuttleworth, J. & Colman, A. Antisense oligonucleotide-directed cleavage of mRNA in Xenopus oocytes and eggs. <i>EMBO J. 7</i> , 427-434 (1988).
KC	BY	Sijen, T. & Kooter, J.M. Post-transcriptional gene-silencing: RNAs on the attack or on the defense? <i>Bioessays</i> 22, 520-531 (2000).
æ	BZ	Smardon, A. et al. EGO-1 is related to RNA-directed RNA polymerase and functions in germ-line development and RNA interference in C. elegans. <i>Curr. Biol.</i> 10, 169-178 (2000).
V	CA	Smith, N.A. et al. Total silencing by intron-spliced hairpin RNAs. Nature 407, 319-320 (2000).
Ø	СВ	Tabara, H. et al. RNAi in C. elegans: Soaking in the Genome Sequence. Science 282, 430-432 (1998).
(C)	CC	Tabara, H. et al. The rde-1 Gene, RNA Interference, and Transposon Silencing in C. elegans. Cell 99, 123-132 (1999).
μ	CD	Tavernarakis, N. et al. Heritable and inducible genetic interference by double-stranded RNA encoded by transgenes. <i>Nat. Genet.</i> 24, 180-183 (2000).
X	CE	Timmons, L. & Fire, A. Specific interference by ingested dsRNA. <i>Nature</i> 395, 854 (1998).
W	CF	Tuschl, T. et al. Targeted mRNA degradation by double-stranded RNA in vitro. Genes Dev. 13, 3191-3197 (1999).
V	CG	Vaucheret, H. et al. Transgene-induced gene silencing in plants. Plant J. 16, 651-659 (1998).
W	СН	Wassenegger, M. & Pelissier, T. A model for RNA-mediated gene silencing in higher plants. Plant Mol. Biol. 37, 349-362 (1998).
V	CI	Waterhouse, P.M. et al. Virus resistance and gene silencing in plants can be induced by simultaneous expression of sense and antisense RNA. <i>PNAS</i> 95, 13959-13964 (Nov. 1998).
W	CJ	Wianny, F. & Zernicka-Goetz, M. Specific interference with gene function by double-stranded RNA in early mouse development. <i>Nature Cell Biol.</i> 2, 70-75 (2000).
V	CK	Wolf, D.A. & Jackson, P.K. Cell cycle: Oiling the gears of anaphase. Curr. Biol. 8, R636-R639 (1998).

Examiner Date Signature Considered JAH 0 5 5003

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Approved for use through 10/31/2002.OMB 0651-0031

U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERQS
eduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

**Complete if Known

Application Number 10/055797

Filling Date January 22, 2002

**Named Inventor David Beach

1638 | 1035

**Complete if Known

Application Number 10/055797

**Filling Date January 22, 2002

**Total Complete if Known

Application Number 10/055797

**Filling Date January 22, 2002

**Total Complete if Known

Application Number 10/055797

**Filling Date January 22, 2002

(use as many sheets as necessary)

5 Sheet

> Zamore, P.D. et al. RNAi: Double-Stranded RNA Directs the ATP-Dependent Cleavage of mRNA at 21 to 23 Nucleotide Intervals. Cell 101, 25-33 (2000)

Date Considered Signature

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

^{&#}x27;Applicant's unique citation designation number (optional). 'Applicant is to place a check mark here if English language Translation is attached.